

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/613,952	07/11/2000	Antti Lappetelainen	NC18815	1944
30973	7590 04/14/2004		EXAMINER	
SCHEEF & STONE, L.L.P.			D AGOSTA, STEPHEN M	
5956 SHERRY SUITE 1400	Y LANE		ART UNIT	PAPER NUMBER
DALLAS, TX	75225		2683	19
			DATE MAILED: 04/14/2004	, , ,

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
•		09/613,952	LAPPETELAINEN ET AL.			
	· Office Action Summary	Examiner	Art Unit			
		Stephen M. D'Agosta	2683			
Period f	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the	correspondence address			
A SH THE - Extrafte - If th - If N' - Fail Any	HORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1. or SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a rep o period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be to ly within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDON	imely filed ays will be considered timely. m the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)🛛	Responsive to communication(s) filed on 26 A	March 2004.				
2a)⊠	This action is FINAL . 2b) This	s action is non-final.				
3)[rosecution as to the merits is					
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.			
Disposit	tion of Claims					
4)⊠	 ✓ Claim(s) 7,12,13,15 and 19-26 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 					
5)⊠	Claim(s) <u>7,12,13,19-21,25 and 26</u> is/are allowed.					
6)⊠	Claim(s) <u>22 and 23</u> is/are rejected.					
7)🖾	Claim(s) <u>24</u> is/are objected to.					
8)[Claim(s) are subject to restriction and/or election requirement.					
Applicat	tion Papers					
9)	The specification is objected to by the Examine	er.				
•	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
, ,	Applicant may not request that any objection to the	•				
	Replacement drawing sheet(s) including the correct	•.,	• •			
11)	The oath or declaration is objected to by the E	• • • • • • • • • • • • • • • • • • • •	•			
Priority	under 35 U.S.C. § 119					
a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea See the attached detailed Office action for a list	ts have been received. ts have been received in Applica prity documents have been receiv nu (PCT Rule 17.2(a)).	tion No ved in this National Stage			
	and analysis detailed a mod determ for a list	. 2. 3.0 commod copied flot receive				
Associate	-4/a\					
Attachmei 1) Noti	nt(s) ce of References Cited (PTO-892)	4) 🔲 Interview Summar	ov (PTO 413)			
	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail I				
3) 🔲 Info	rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 er No(s)/Mail Date) 5) Notice of Informal 6) Other:	Patent Application (PTO-152)			

Application/Control Number: 09/613,952 Page 2

Art Unit: 2683

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 3-26-04 have been fully considered but they are not persuasive:

- 1. Claims 7, 12-13, 15, 19-21 and 25-26 are, in the examiner's opinion, allowable.
 - 2. Claims 22-23 still stand rejected and claim 24 is objected to.
- 3. The applicant argues that prior art does not teach claim 22 whereby power correction information has a value that varies as a function of whether the power management occurs during a contention period or contention-free period. The examiner disagrees since Gourgue teaches power control whereby the base transceiver transmits on the broadcast channel a power correction (abstract) AND Kamerman discloses wireless LAN with enhanced carrier sense provision (title) that also shows contention windows (figure 1) and infers non-contention windows (as is known in Ethernet systems) AND Raissinia teaches that the power control system is based upon the measurement of received data transmissions (C6, L5-7) which tend to occur at irregular intervals. Further to this point, Kamerman discloses wireless LAN with enhanced carrier sense provision (title) that also shows contention windows (figure 1) and infers non-contention windows (as is known in Ethernet systems). Hence one skilled would provide for power correction information to be generated during selected intervals (ie. during contention-free periods, during contentious periods, etc.) as disclosed by Kamerman. Lastly, the applicant makes reference to IEEE 802.11 (page 2 in the amendment to the specification). Hence the rejection for Contention Free period(s) is derived from the IEEE 802.11 standard and hence one skilled in the art would use said standard as a basis for power control in an 802.11 wireless LAN.

Application/Control Number: 09/613,952 Page 3

Art Unit: 2683

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

<u>Claim 22</u> rejected under 35 U.S.C. 103(a) as being unpatentable over Raissinia US 6,408,165 in view of Kamerman et al. U.S. Patent 6,067,291 and Gourgue U.S. Patent 5,564,075 (hereafter Raissinia, Kamerman and Gourgue).

As per claims 9, 17 and 22, Raissinia teaches a radio system having a network infrastructure for communicating data with a first mobile and at least a second mobile communicate data (figure 1), the data forming portions of communication signals transmitted at selected power levels (title – power regulation), an improvement of an assembly for facilitating selection of the power levels at mobile stations which to transmit signals, said assembly comprising:

A signal generator coupled to the network infrastructure, said signal generator for generating <u>during respective selected intervals</u> a transmit power indication signal <u>and a power correction signal</u> for transmission to at least a selected one of the first mobile and the at least second mobile, the transmit power indication signal (C3, L8-23 and C5, L54-67 to C6, L1-14).

but is silent on wherein power correction information signal has a value that varies as a function of whether the power management occurs during a contention period or a contention-free period.

Gourgue teaches power control whereby the base transceiver transmits on the broadcast channel a power indication representing transmit power (abstract).

Kamerman discloses wireless LAN with enhanced carrier sense provision (title) that also shows contention windows (figure 1) and infers non-contention windows (as is known in Ethernet systems).

Raissinia teaches that the power control system is based upon the measurement of received data transmissions (C6, L5-7) which tend to occur at irregular intervals. It would be a design choice to modify the invention such that the power indication signal is generated during selected intervals (ie. during contention-free periods, during contentious periods, etc.) which is disclosed by Kamerman above.

(Claim 22) The examiner points out that the 802.11 standard, as referenced by the applicant, has both contention-based (eg. DCF) AND contention-free access (eg. PCF) methods. Hence, one skilled in the art would transmit the power indication signal during both the DCF period an/or the PCF period as a design choice since both options are available per the standard (and Kamerman teaches both periods).

Application/Control Number: 09/613,952

Art Unit: 2683

It would have been obvious to one skilled in the art at the time of the invention to modify Raissinia, such that a beacon is used wherein transmit power signal is broadcast as part of the beacon signal, to provide means for the beacon signal/channel to be used to send the transmit power signal which more efficiently uses said beacon channel (eg. is used for two operations).

As per claim 23, Raissinia teaches claim 22 wherein the radio system defines beacon intervals within which beacon signals are broadcast by the network **but is silent on** wherein the transmit power indication signal generated by said signal generator is broadcast as part of the beacon signals.

Kamerman discloses wireless LAN with enhanced carrier sense provision (title) that also shows contention windows (figure 1) and infers non-contention windows (as is known in Ethernet systems).

Raissinia teaches that the power control system is based upon the measurement of received data transmissions (C6, L5-7) which tend to occur at irregular intervals. It would be a design choice to modify the invention such that the power indication signal is generated during selected intervals (ie. during contention-free periods, during contentious periods, etc.) which is disclosed by Kamerman above.

(Claim 22) The examiner points out that the 802.11 standard, as referenced by the applicant, has both contention-based (eg. DCF) AND contention-free access (eg. PCF) methods. Hence, one skilled in the art would transmit the power indication signal during both the DCF period an/or the PCF period as a design choice since both options are available per the standard (and Kamerman teaches both periods).

It would have been obvious to one skilled in the art at the time of the invention to modify Raissinia, such that a beacon is used wherein transmit power signal is broadcast as part of the beacon signal, to provide means for the beacon signal/channel to be used to send the transmit power signal which more efficiently uses said beacon channel (eg. is used for two operations).

Allowable Subject Matter

<u>Claims 7, 12-13, 15, 19-21 and 25-26 allowed</u>. The prior art does not disclose such detailed, specific teachings.

<u>Claim 24</u> objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2683

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta 4-04

WILLIAM TROST SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600